



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,554	09/26/2003	Rajdeep S. Kalgutkar	58753US002	8850

32692 7590 07/26/2005

3M INNOVATIVE PROPERTIES COMPANY
PO BOX 33427
ST. PAUL, MN 55133-3427

EXAMINER

MCCLENDON, SANZA L

ART UNIT	PAPER NUMBER
----------	--------------

1711

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/672,554

Applicant(s)

KALGUTKAR, RAJDEEP S.

Examiner

Sanza L. McClendon

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2005 ~~26 September 2003~~ *SMC 7/22/05*
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 29-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-28 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/10/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1711

DETAILED ACTION

Response to Amendment

1. In response to the Amendment received on May 10, 2005, the examiner has carefully considered the amendments.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-16, 22-24, 29-32 and 34 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 and 21-24, 26-27, 33-38, and 39 of copending Application No. 10/672,762 in view of Shimda et al^a (JP 2002-341519). The instant claims differs from co-pending 10/672,762 in that the electron donor compound can be an iodonium salt or peroxide in 10/672,762 and the electron acceptor compound in the instant claimed invention is a triarylsulfonium salt. However JP 2002-341519 shows that it is well known in the art to combine an arylsulfinate anion having ammonium cation with an onium salt initiator, such as an iodonium salt or a sulfonium salt or peroxide—see paragraph [0032] and the incorporated by reference document found in [0032]. Another difference is the sensitizing compound in the polymerization method found in 10/672,762. However, JP 2002-341519 teaches it is known to added colorants, such as dyes to compositions comprising arylsulfinate salts having ammonium

Art Unit: 1711

cations in combination with other onium salts, such as iodonium and sulfonium salts, wherein said dyes helps to increase (speed) the polymerization activity (time)—see [0058].

Therefore, it would have been obvious for an artisan of ordinary skill in the art to prepare the instantly claimed invention from the combined teachings of application 10/672,762 and JP 2002-341519. The motivation would have been a reasonable expectation of obtained a faster curing, as well as, stable initiator system as taught by JP 2002-341519 for polymerization of ethylenically unsaturated monomers.

This is a provisional obviousness-type double patenting rejection.

4. Claims 1-6, 22-24, and 29-33 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, 8-10, 12-15, 18, and 20-24 of copending Application No. 10/672,714 in view of Shimda et al^a (JP 2002-341519). The instant claims differ from co-pending 10/672,814 in that there are dental additives in 10/672,814. However, applicant's language in the instantly claimed invention is open language and open to other material components. Therefore it would have been obvious for an artisan of ordinary skill in the art to add additives to the instant compositions to tailor for a specific use. Additionally, 10/672,814 adds a sensitizing compound to the composition. However, it is known from the prior art (see Shimda et al) that the addition of coloring materials, especially dyes, are useful not only as coloring agents but as rate enhancers for the initiator system. The last difference is the addition of an electron acceptor, which can be an iodonium salts or peroxides. Shimda et al teaches it is well known in the art to combine an arylsulfonate anion having ammonium cation with an onium salt initiator or peroxide, such as an iodonium salt or a sulfonium salt—see paragraph [0032] and the incorporated by reference document found in [0032].

Therefore, in the examiner's opinion it would have been obvious for an artisan of ordinary skill in the art to prepare the instantly claimed invention from the combined teachings of application 10/672,814 and JP 2002-341519. The motivation would have been a reasonable expectation of obtained a faster curing, as well as, stable initiator system as taught by JP 2002-341519 for polymerization of ethylenically unsaturated monomers.

This is a provisional obviousness-type double patenting rejection.

5. Claims 1-16, and 22-23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19, and 21 of copending Application No. 10/847,523 in view of Shimda et al^a (JP 2002-341519). The instant invention differs from the co-pending application in that the instant claims have a triarylsulfonium salt electron acceptor, which differs from the electron acceptors

Art Unit: 1711

not present in 10/847,523. In addition, the open language in 10/847,523 claim 1 does not exclude the addition of other electron acceptors that differ from those found within the claims of 10/847,523. Other differences include the addition of a sensitizer compound such as a dye. In spite of this, it is known from the prior art (see Shimda et al) that the addition of coloring materials, especially dyes, are useful not only as coloring agents but as rate enhancers for the initiator system. Therefore, in the examiner's opinion it would have been obvious for an artisan of ordinary skill in the art to prepare the instantly claimed invention from the combined teachings of application 10/847,523 and JP 2002-341519. The motivation would have been a reasonable expectation of obtaining a faster curing system as taught by JP 2002-341519 for polymerization of ethylenically unsaturated monomers.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 102/35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
7. Claims 1-7, 14, 17-19, and 21-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Shimda et al ⁰ (JP 2002-341519).

The text of the rejection not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
9. Claims 11-13 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimda et al (JP 2002-341519) in view of JP 09-34410 (herein '110).

The text of the rejection not included in this action can be found in a prior Office action.

Art Unit: 1711

10. Claims 1-5, 11, 14, 17-19, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawashima et al (5,486,544) in view of Shimda et al (JP2002-341519).

The text of the rejection not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

11. Claims 25-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimda et al (JP 2002-341519).

The text of the rejection not included in this action can be found in a prior Office action.

Allowable Subject Matter

12. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments filed May 10, 2005 have been fully considered but they are not persuasive. It appears applicant is relying on the limitation added to the claims by the amendment filed May 10, 2005. The references are deemed when taken alone or in combination as found above to teach and/or render obvious the amended limitations. For instance Shimda et al (JP 2002-341519) teaches that component (A) having the formula, as found in the reference, has a maximum absorption wavelength of preferably 400 nm or less, further preferably 360 nm or less—see column 38, lines 65 to end. Additionally, Shimda et al teaches light-and-heat conversion agent (B) is an infrared absorbing dye or pigment having a maximum at from 760 nm to 1200nm—see column 39, lines 25-29. The examiner deems that the composition as taught by Shimda et al, while having other radiation absorbing components, does not have component that compete for the absorption of actinic radiation supplied. Especially since the components have absorption in different/non-competitive wavelength regions. Additionally, the examiner deems these arguments are the same for the remaining rejections, since these are in combination with the above-discussed reference.

Conclusion

Art Unit: 1711

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 6,759,177 and USPG Pub application 2003/0054288 to Shimda et al teaches a composition comprising an arylsulfinate salt having the same anion as the instant claims in combination with a triarylsulfonium salt. These references are in the same patent family as the JP 2002-341519 cited in the above rejections.


15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sanza L. McClendon

Examiner

Art Unit 1711

SMc